

# FQSS 266-Q

Diode Pumped Passively Q-Switched Solid State Laser

- 266 nm
- Pulsed ( $\leq 1.0$  ns)
- Up to 1.5  $\mu$ J
- Up to 5 kHz
- External and Internal Trigger Mode
- Free Beam



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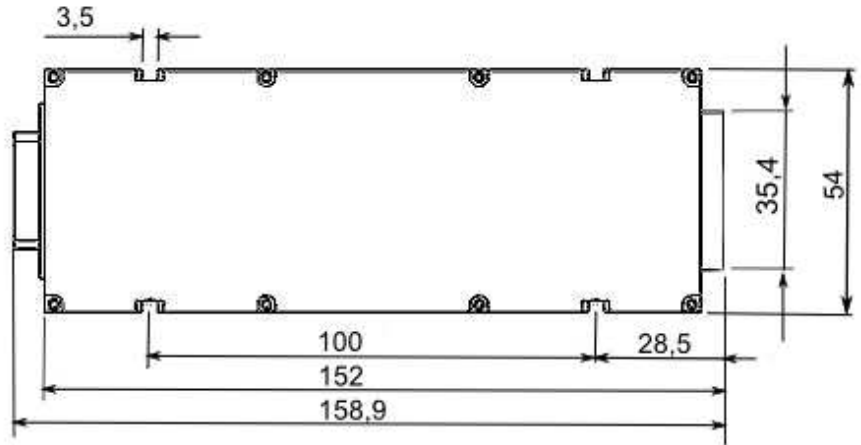
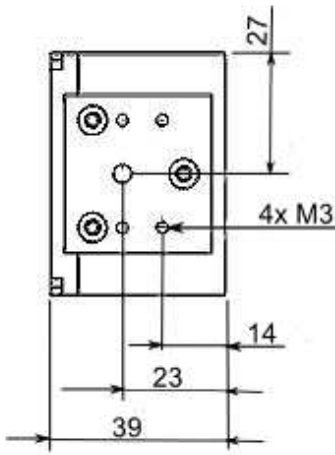
Optical Data		FQSS266-Q1	FQSS266-Q2
	Wavelength	266 nm	
	Pulse Energy	> 0.3 $\mu$ J @ 5 kHz	> 1.25 $\mu$ J @ 1 kHz
	Peak Power	> 0.3 kW @ 5 kHz	> 1.25 kW @ 1 kHz
	Max. Pulse Repetition Rate	5 kHz	2.5 kHz
	Pulse Width (FWHM)	$\leq 1.0$ ns	
	Polarization Ratio	> 100:1 vertical	
	Power Stability (%rms, 6 hours) <sup>1)</sup>	< $\pm 5$ %	
	Laser Classification	4 / IV	
Optical Output	Spatial Mode	TEM <sub>00</sub>	
	Beam Divergence (full angle)	< 2.0 mrad	
	Beam Diameter at Output Plane	850 $\pm$ 150 $\mu$ m	
Electrical Data	Power Consumption mean (max.)	15 W (40 W)	20 W (70 W)
	Operating Voltage (OEM)	12 V DC	
	Line Voltage (with AC-DC adapter)	90 - 240 V AC	
	Marking	CE	
Interfaces	RS 232, USB		
	External Trigger (TTL, rising edge) 1 Hz - max. repetition rate		
	SERVICE Interface for TTL-control and power monitor		
Miscellaneous	Warm-up Time	< 5 min	
	Operating Temperature	18 - 38 °C	
Options	Stand alone system (incl. key-switch, heat-sink and manual shutter; CDRH compliant)		
	Synchronization Signal Output (rise time < 2 ns)		
	Manual shutter or electrical beam blocker		
	External telescope (e.g. M=3)		
	Manual or electrical driven wavelength switch 266 nm / 532 nm		
	Manual or electrical attenuator		
	Upgrade to 8 mW		

<sup>1)</sup> after 5 min warm up, temperature variation  $\pm 3$  °C and < 3 °C/hour

## Dimensions

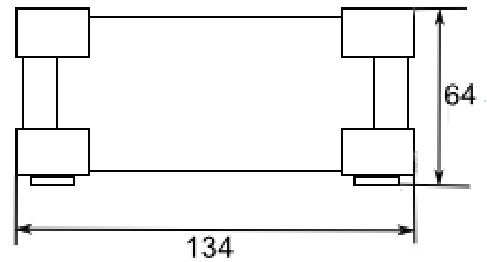
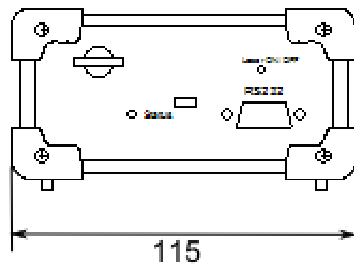
Laser Head:

158.9 x 54 x 39 mm



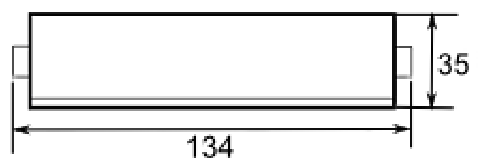
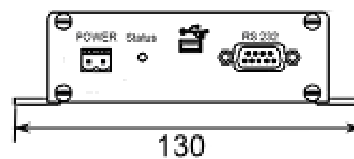
Controller STAND ALONE:

134 x 115 x 64 mm



Controller OEM:

134 x 130 x 35 mm



## Laser Safety Label

The FQSS266-Q lasers are class 4 according to IEC 60825-1:2007



wavelength: 266 nm  
 max. output: 1 µJ  
 pulse duration: <1.0 ns  
 max. repetition rate: 5 kHz  
 Complies with IEC 60825.1 (October 2007)  
 Complies with 21 CFR 1040.10 and 1040.11  
 except for deviations pursuant to  
 Laser Notice No. 50, dated July 26, 2001

**INVISIBLE  
 LASER RADIATION  
 AVOID EXPOSURE  
 TO BEAM  
 CLASS 4 LASER  
 PRODUCT**

Q1 series

wavelength: 266 nm  
 max. output: 2.5 µJ  
 pulse duration: <1.0 ns  
 max. repetition rate: 2.5 kHz  
 Complies with IEC 60825.1 (October 2007)  
 Complies with 21 CFR 1040.10 and 1040.11  
 except for deviations pursuant to  
 Laser Notice No. 50, dated July 26, 2001

**INVISIBLE  
 LASER RADIATION  
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Q2 series